

AMENDMENTS TO THE CLAIMS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

- 1-13. (Canceled)
14. (Previously presented) A method of screening a substance comprising assessing the effect of said substance on a GTPase-GTPase effector interaction, wherein the GTPase is a GTPase of the Rab family.
15. (Canceled)
16. (Previously presented) The method of claim 14, wherein the GTPase is Rab4, Rab5, Rab7, Rab11, Rab17, Rab18, or Rab22.
- 17-21. (Canceled)
22. (Previously presented) The method of claim 14, wherein the effect of said substance on the GTPase-GTPase effector interaction is determined in the presence of a labeled GTPase effector/regulator molecule.
23. (Previously presented) The method of claim 22, wherein the label is a fluorescent or radioactive label.
24. (Withdrawn) The method of claim 14, wherein assessing comprises determining GTPase function.
25. (Previously presented) The method of claim 14, wherein assessing comprises determining GTPase interaction with a GTPase effector/regulator molecule.

26. (Withdrawn) The method of claim 24, wherein GTPase function is determined by measuring GTP/GDP nucleotide exchange, GTP hydrolysis, endosomal motility, and endosomal trafficking.
27. (Previously presented) The method of claim 25, wherein a GTPase effector molecule is bound to a substrate.
28. (Previously presented) The method of claim 27, wherein the substrate is a chromatographic matrix or a bead.
29. (Previously presented) The method of claim 14, wherein the substance comprises one or more of the following functional groups: a halide atom bound to an alkyl, alkenyl, alkynyl or aryl residue, an alcohol group (primary, secondary, tertiary), an ether group, a carbonyl function (aldehyde or ketone), a carboxylic acid group, a carboxylic anhydride group, a carbamoyl group, a haloformyl group, a cyano group, an ester group including a lactone group, a benzyl, phenyl, tolyl, tosyl, sulfonyl group, an amino group (primary, secondary, tertiary), a sterol moiety, an isocyanate, a cyanate, a thioisocyanate, a thiocyanate, a carbamate, an azide, a diazo group, or a quinone group.
30. (Previously presented) The method of claim 14, wherein the substance is an organometallic compound, a β -hydroxy carboxylic acid, an inorganic acid or complex such as a metallocene, a nucleic acid.
31. (Withdrawn) The method of claim 40, wherein the antibody is a polyclonal or monoclonal antibody, or a fragment thereof, a humanized or human antibody, an inhibitory or stimulatory antibody.
32. (Withdrawn) The method of claim 14, wherein the substance is a protein or peptide.
33. (Withdrawn) The method of claim 32, wherein the protein is a cytokine, a hormone, or an antibody.

34. (Withdrawn) The method of claim 32, wherein the peptide is an oligopeptide comprising up to 20 amino acid residues
35. (Withdrawn) The method of claim 34, wherein the oligopeptide is about 8, about 10 or about 12 amino acid residues in length.
36. (Withdrawn) The method of claim 14, wherein the substance is a nucleic acid.
37. (Withdrawn) The method of claim 36, wherein the nucleic acid is genomic DNA, cDNA, or mRNA, an oligonucleotide, or an oligoribonucleotide, wherein said nucleic acid encodes all or a fragment of a proteinaceous GTPase effector.
38. (Withdrawn) The method of claim 37, wherein the encoding sequence is SEQ ID NO: 1, 3, 5, 7, 9, 11, 13, or and 15.
39. (Withdrawn) The method of claim 37, wherein the nucleic acid further comprises a gene therapy vector.
40. (Withdrawn) The method of claim 14, wherein the substance is an antibody.
41. (Withdrawn) The method of claim 36, wherein said nucleic acid is ribo- or deoxyribonucleic acid complementary in a sense or antisense manner to SEQ ID NO: 1, 2, 5, 7, 9, 11, 13 or 15.
42. (Withdrawn) The method of claim 41, wherein the nucleic acid is at least 70% identical in a sense or antisense manner to SEQ ID NO: 1, 2, 5, 7, 9, 11, 13 or 15.
43. (Withdrawn) The method of claim 42, wherein the nucleic acid is at least 90% identical in a sense or antisense manner to SEQ ID NO: 1, 2, 5, 7, 9, 11, 13 or 15.